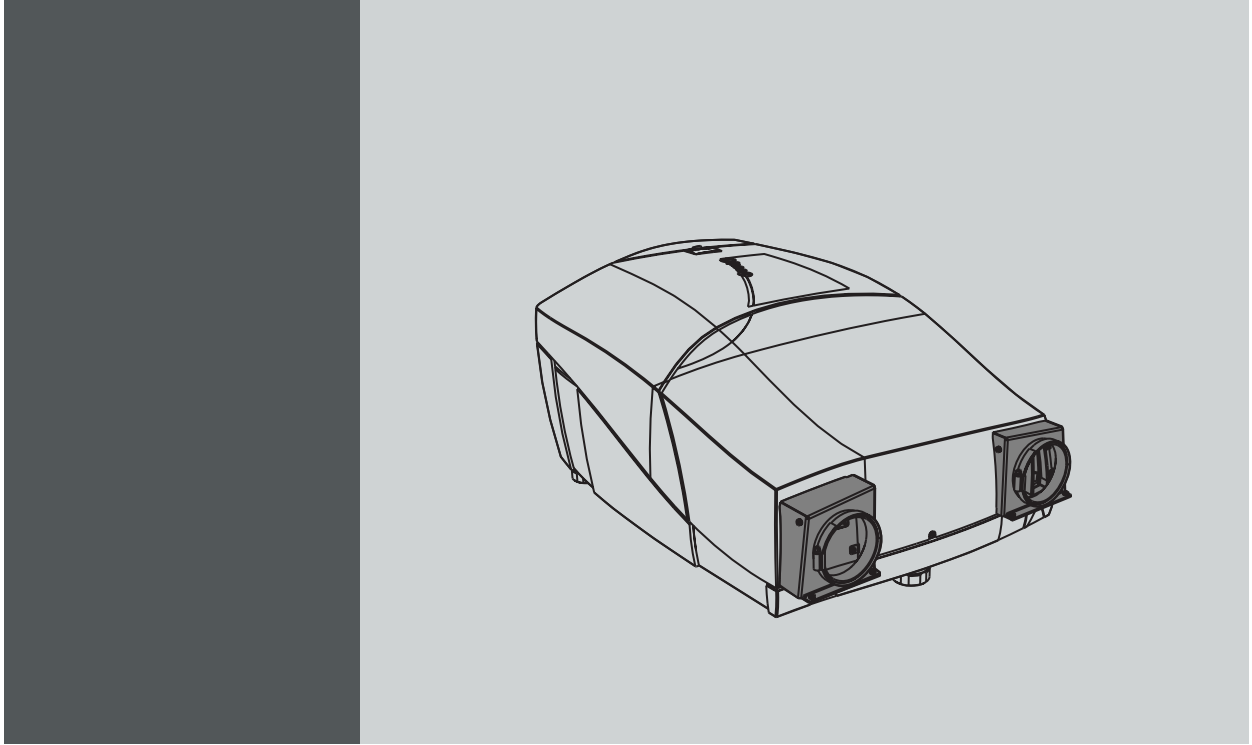


# Heat Exhaust kit



Installation manual  
NH-12 series and NW-xx series

R9843115

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# 1. EXHAUST KIT DESCRIPTION

## About this manual

This manual describes the **Heat Exhaust kit** with part number R9843115 and the way to install it on a projector.

## Overview

- Domain of application
- Specifications
- Kit content

## 1.1 Domain of application

### What can be done ?

The Heat Exhaust kit allows to connect an external tube system to the projector in order to transport the exhaust hot air outside the projection area.

Each projector has 2 exhausts:

1. left exhaust;
2. right exhaust.

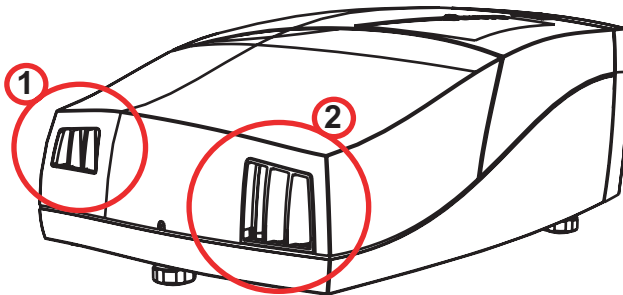


Image 1-1  
Exhaust location

One can decide to connect only one or both exhausts.

### Projector range

The Heat Exhaust kit is intended to be used on the following projector ranges:

- (Galaxy) NH-12;
- (Galaxy) NW-12;
- Galaxy NW-7.

## 1.2 Specifications

### Heat dissipation per projector

The maximum heat dissipation of the projector when it runs at full power is 2800 W or 9560 BTU/h. This value can be different, depending on the power rate of the lamp (i.e. Economy mode or Normal mode).

### Outlet temperature

The maximum temperature of the air at the outlet is 60° C when the projectors run at full power and assuming the environmental temperature to be 20° C maximum. All elements in the air extraction need to resist at least a temperature of 60° C for long duration.

### Air speed

For acoustical reasons, an air speed of 6 m/s is typically recommended in an office/auditorium environment. In a display system where the projectors and the collector are not situated inside the projection room, the air speed in the tubes between projector outlet and "collector" tube can be slightly higher.

## 1. Exhaust kit description

### Flow rate

The flow rate varies, as the speed of the internal fans changes depending on the power rate of the projector and depending on the ambient temperature. The maximum flow rate is 50 l/s per projector. The airco can be designed to extract 50 l/s per projector at all time.

The following table lists the air flow at both exhausts in different lamp power modes:

Exhaust air flow	Economy lamp mode	Normal lamp mode
1	3,3 l/s	6,4 l/s
2	20,3 l/s	31,3 l/s

### Outlet tube

The external diameter of the outlet tubes is 100 mm, which matches the common size of 100 mm for flexible extraction pipes. For a flow rate of 50 l/s, this results in an air speed of 6,4 m/s.



The extraction pipes are not included in this kit

### Extraction control

No air extraction control is required. It is no problem that air is sucked through the projectors even when they are switched off.

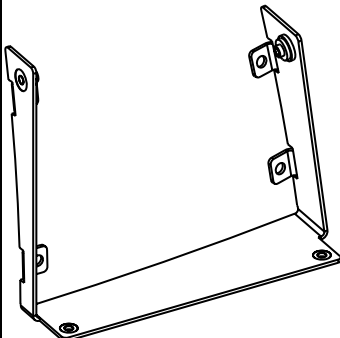
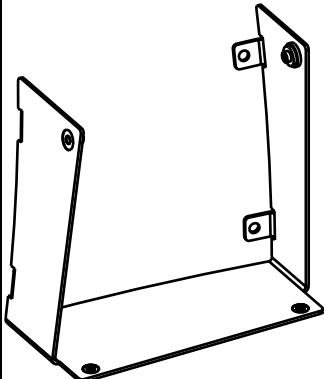


Please note that heat dissipation in the room is obviously less when all projectors are switched off. For good stability of the system, the projection room should be kept to the same temperature level, no matter if the projectors are on or off. Therefore the airco must be controlled in some way by temperature sensors in the projection room.

## 1.3 Kit content

### Bill of material

The following table gives an overview of the parts contained in the Heat Exhaust kit:

Name	Qty	Illustration
Right exhaust bracket	1	
Left exhaust bracket	1	



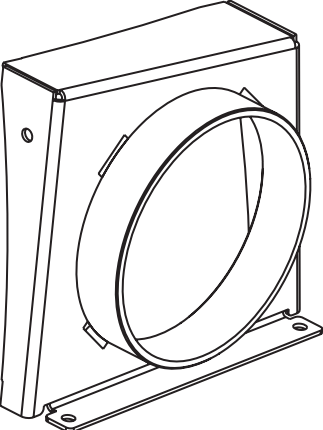
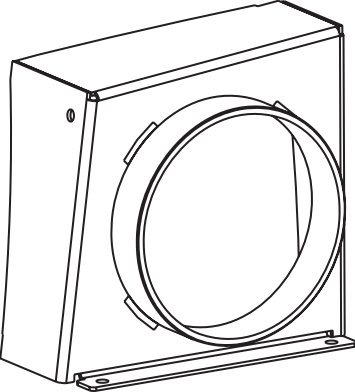
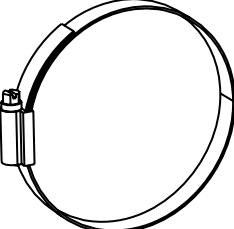
Name	Qty	Illustration
Right exhaust housing	1	
Left exhaust housing	1	
Fastening ring	2	
Screw 3,9 x 10	8	-
Screw 4 x 8	8	-

Table 1-2  
Kit content

*1. Exhaust kit description*

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## 2. INSTALLATION OF THE EXHAUST

### Overview

- Preparations
- Mounting the parts

### 2.1 Preparations

#### Overview

- Removing the rear cover
- Preparing the rear cover

#### 2.1.1 Removing the rear cover

##### Necessary tools

Philips Ph2

##### How to remove the rear cover?

1. Remove the fixing screw

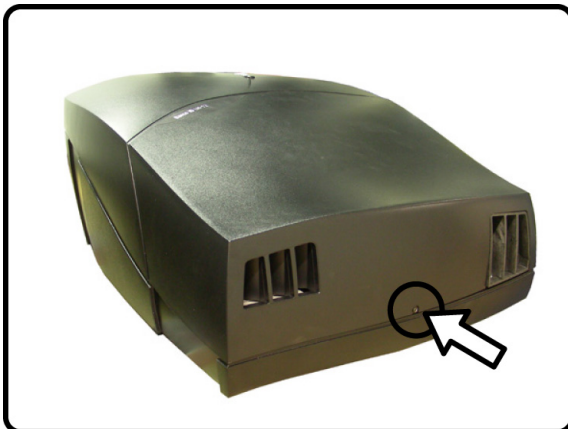


Image 2-1  
Rear cover: fixing screw

2. Lift the back side of the rear cover and pull it backward to remove it



Image 2-2  
Tilt the back side of the rear cover

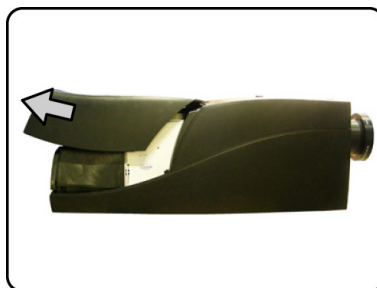


Image 2-3  
Pull the rear cover backward



Image 2-4  
Rear cover removed

#### 2.1.2 Preparing the rear cover

##### Necessary tools

- Marker pen
- Drill with diameter 3,3 mm

## 2. Installation of the Exhaust

---

### Necessary parts

- Left outlet bracket
- Right outlet bracket
- Projector rear cover

### How to prepare the cover mount the outlet bracket?

1. Position the outlet brackets as indicated below (the brackets must interfere with the open exhaust area) and mark the position of the 8 foreseen fixation holes.

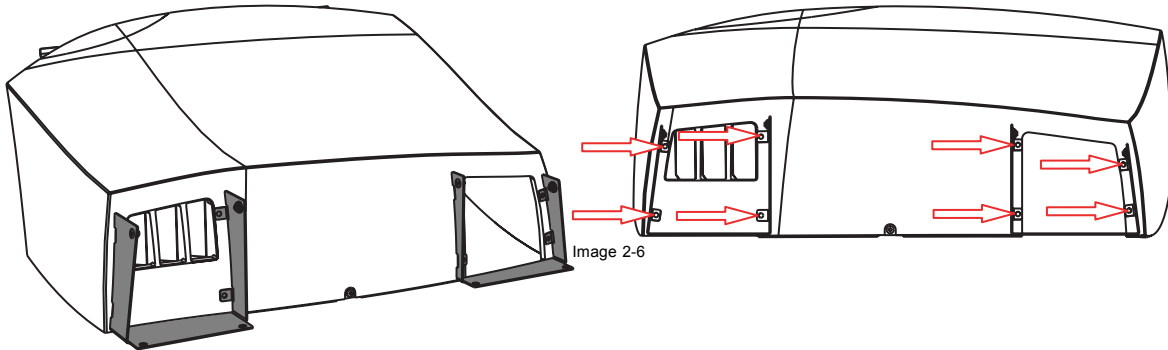


Image 2-5

2. Drill 3,3 mm diameter holes on the 8 marked positions.

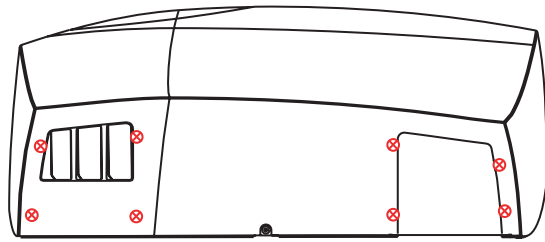


Image 2-7

## 2.2 Mounting the parts

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### Necessary tools

- Torx
- Philips Screwdriver

### Necessary parts

- 8 delivered screws
- Left outlet bracket
- Right outlet bracket
- Projector rear cover
- Left outlet housing
- Right outlet housing
- Rings
- Tube(s)

### How to mount the brackets and the outlet housings?

1. Mount the left and the right bracket using the 8 screws.

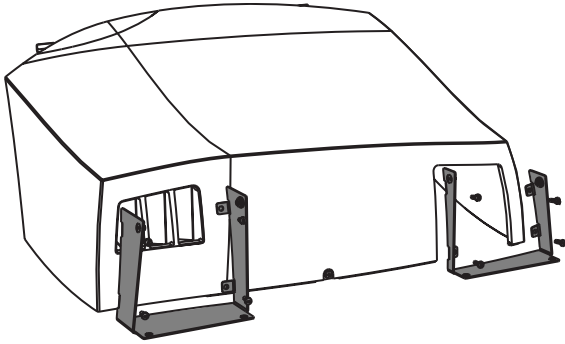


Image 2-8

2. Mount and fix the left and right housings on the brackets using the 8 screws.

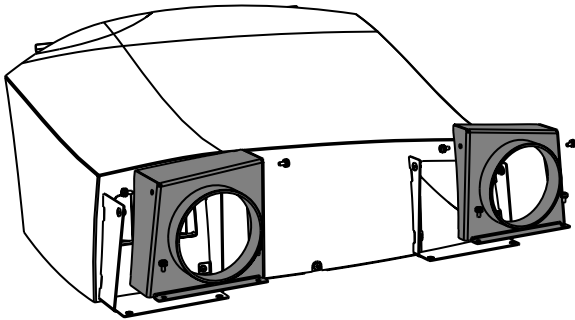


Image 2-9

### How to connect a tube to the exhaust?

1. Mount the rings without fastening them.

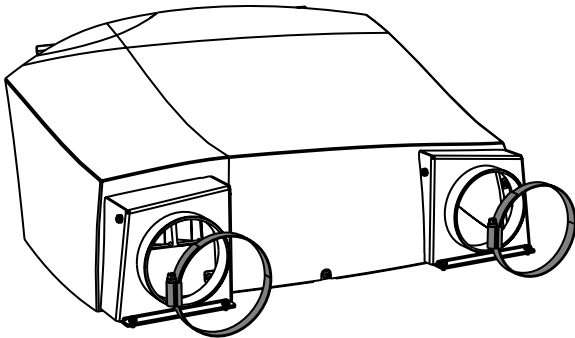


Image 2-10

2. Mount and fix the assembled cover on the projector.

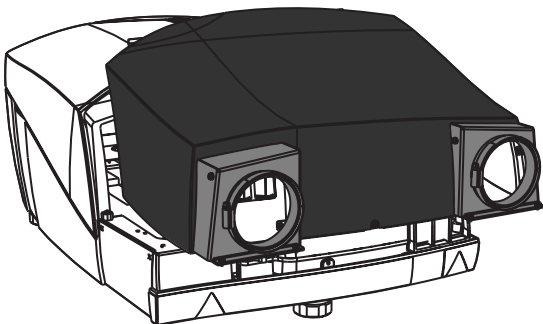


Image 2-11

3. Mount the tube(s) and fasten the rings.

## 2. Installation of the Exhaust

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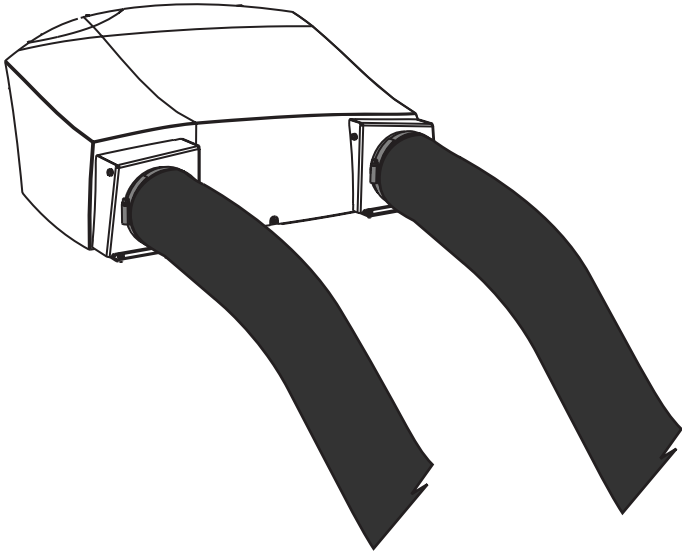


Image 2-12

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